

LPDES PERMIT NO. LA0005827, AI NO. 2518, ACTIVITY NO. PER20060003

**LPDES STATEMENT OF BASIS
FOR THE DRAFT MODIFIED LOUISIANA POLLUTANT DISCHARGE
ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA**

COMPANY/FACILITY: Degussa Engineered Carbons, LP
Ivanhoe Carbon Black Plant
Post Office Box 9320
New Iberia, Louisiana 70562

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

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Water Permits Division
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DATE PREPARED: April 5, 2007

1. PERMIT STATUS

- A. Reason For Permit Action:
Modification of existing Louisiana Pollutant Discharge Elimination System (LPDES) permit LA0005827 following regulations promulgated at LAC 33:IX.3105. In accordance with LAC 33:IX.3105.B.2, only those permit limits and conditions pertaining to the draft modifications are open for public comment.
- B. LPDES permit effective date: January 1, 2006
LPDES permit expiration date: December 31, 2010
- C. Date Application Received: August 9, 2006

2. FACILITY INFORMATION

- A. LOCATION: 7095 LA Hwy 83 South, Louisa, St. Mary Parish
Latitude: 30° 3' 11", Longitude: 90° 38' 28"

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B. FACILITY TYPE/ACTIVITY:

Degussa Engineered Carbons – Ivanhoe Carbon Black Plant is an existing facility that manufactures carbon black by using the furnace process of thermal decomposition of hydrocarbons.

The discharges from this facility include non-process wastewater and treated sanitary wastewater.

There is no discharge of process wastewater or process area stormwater from the Ivanhoe Carbon Black Plant under normal operating conditions. Process wastewaters generated from the carbon black manufacturing process, including process area stormwater, are collected and recycled back to the process. During excess precipitation, it is possible, but rare, that the final tank in the Modular Tank System will overflow into the nonprocess area storm water outfall, Outfall 001.

C. TECHNOLOGY BASIS:

40 CFR Chapter I, Subchapter N, Effluent Guidelines and Standards, Parts 401 and 405 - 471 have been adopted by reference in LAC 33:IX.4903.

Guideline

Carbon Black Furnace Process Subcategory

Reference

40 CFR 458 Subpart A

Other sources of technology based limits:

Similar Outfall at Existing Facility

Best Professional Judgment

Current LPDES permit

D. FEE RATE:

1. Fee Rating Facility Type: Minor
2. Complexity Type: III
3. Wastewater Type: III
4. SIC codes: 2895

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3. OUTFALL INFORMATION

Outfall 001:

Discharge Type: The combined discharge of non-process area stormwater runoff and previously monitored effluent from Internal Outfalls 201 and 301.
Treatment: None
Location: From the east flood pump discharge prior to discharging into Ivanhoe Canal at Latitude 29° 46' 36", Longitude 91° 43' 59"
Flow: Intermittent
Discharge Route: Ivanhoe Canal

Outfall 201 (Listed in current permit as Outfall 002):

Discharge Type: The emergency discharge of process area stormwater from the Modular Tank System internal to Outfall 001.
Treatment: Settling
Location: At the point of discharge from the Modular Tank System prior to commingling with non-process area stormwater in Outfall 001 at Latitude 29° 46' 36" Longitude 91° 43' 59"
Flow: Intermittent
Discharge Route: Combines with the effluent at Outfall 001

Outfall 301 (Listed in current permit as Outfall 003):

Discharge Type: The discharge of treated sanitary wastewater
Treatment: Settling, filtration, aeration, aerobic digestion and chlorination
Location: At the point of discharge from the sanitary treatment system, prior to combining with uncontaminated stormwater in Outfall 001 at Latitude 29° 46' 36", Longitude 91° 43' 29"
Flow: 0.0144 MGD
Discharge Route: Combines with the effluent at Outfall 001

Outfall 004:

Discharge Type: The emergency discharge of process area stormwater runoff
Treatment: None
Location: At the point of discharge from the process area prior to combining with other waters of Ivanhoe Canal at Latitude 29° 46' 30", Longitude 91° 44' 10"
Flow: Intermittent
Discharge Route: Unnamed drainage ditch to Ivanhoe Canal

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(Outfall Information cont):

Outfall 005:

Discharge Type: The emergency discharge of process area stormwater runoff
 Treatment: None
 Location: At the point of discharge from the process area prior to combining with
 other waters of Ivanhoe Canal at
 Latitude 29° 46' 30", Longitude 91° 44' 11"
 Flow: Intermittent
 Discharge Route: Unnamed drainage ditch to Ivanhoe Canal

4. RECEIVING WATERS

Stream: Ivanhoe Canal

Basin and Subsegment: Vermillion-Teche, Segment 060906

Designated Uses:

- a. primary contact recreation
- b. secondary contact recreation
- c. propagation of fish and wildlife

5. PROPOSED CHANGES TO CURRENT LPDES PERMIT

- A. Re-designation of Outfall 002 to 201.
- B. Re-designation of Outfall 003 to 301.
- C. Add additional Outfalls 004 and 005 for discharge of storm water from the process area during emergency discharge conditions.
- D. Removal of pH limits at Outfalls 201 and 301 due to pH limits at the final Outfall 001.

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6. PROPOSED EFFLUENT LIMITS

Guidelines under the Code of Federal Regulation at 40 CFR Part 458 Subpart A apply to the carbon black manufacturing furnace subcategory. Under this guideline discharges of process wastewater are prohibited. All process discharges from Ivanhoe Carbon Black Plant are recycled back into the process.

Outfall 001: The combined stormwater runoff and previously monitored effluent from Internal Outfalls 201, 301

Internal Outfall 201: The emergency discharge of process area stormwater from the Modular Tank System

Internal Outfall 301: The discharge of sanitary wastewater.

Outfall 004: Emergency discharge of process area stormwater runoff from the Modular Tank System

EFFLUENT CHARACTERISTIC	MONTHLY AVERAGE	DAILY MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE	REFERENCE
Flow-MGD	Report	Report	1/discharge	Estimate	BPJ; Similar Outfall; existing permit
TOC	---	50 mg/L	1/discharge	Grab	BPJ; Similar Outfall; existing permit
Oil & Grease	---	15 mg/L	1/discharge	Grab	BPJ; Similar Outfall; existing permit
TSS	---	Report	1/discharge	Grab	BPJ; TMDL data gathering
pH Min/Max values (su)	6.0	9.0/L	1/discharge	Grab	BPJ; Similar Outfall; existing permit*

*When discharging.

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(Proposed Effluent Limits con't)

Outfall 005: Emergency discharge of process area stormwater runoff from the Modular Tank System

EFFLUENT CHARACTERISTIC	MONTHLY AVERAGE	DAILY MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE	REFERENCE
Flow-MGD	Report	Report	1/discharge	Estimate	BPJ; Similar Outfall; existing permit
TOC	---	50 mg/L	1/discharge	Grab	BPJ; Similar Outfall; existing permit
Oil & Grease	---	15 mg/L	1/discharge	Grab	BPJ; Similar Outfall; existing permit
TSS	---	Report	1/discharge	Grab	BPJ; TMDL data gathering
pH Min/Max values (su)	6.0	9.0/L	1/discharge	Grab	BPJ; Similar Outfall; existing permit

*When discharging

7. COMPLIANCE HISTORY/COMMENTS

A. Compliance History

1. WQMD – None
2. Other Divisions – None

B. Inspections

A site inspection was conducted on May 30, 2002. All areas were reported satisfactory.

C. A DMR review was conducted covering the period of March 1, 2002 through December 31, 2006. No excursions were reported.

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8. TMDL STATUS

Subsegment No. 060906 of the Vermillion-Teche Basin is listed on the 2004 Final Integrated 303(d) List as impaired for Total Suspended Solids (TSS) and Carbofuran.

The percent reduction needed to achieve the target TSS for this subsegment is listed as 0%. Therefore, TSS reporting requirements have been established at Outfall 004 and Outfall 005.

The Carbofuran impairment was identified as originating from rice farming activities prior to 1999. It has been determined that the non-process area stormwater, emergency stormwater discharges and sanitary discharges from Degussa Engineered Carbons, LP are minor in nature and are not reasonable expected to further contribute to the carbofuran impairment. Therefore, no Carbofuran requirements were place in this permit.

9. EXISTING EFFLUENT LIMITS

Outfall 001: stormwater

EFFLUENT CHARACTERISTIC	MONTHLY AVERAGE	DAILY MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow-MGD	Report	Report	1/quarter	Estimate
TOC	---	50 mg/L	1/quarter	Grab
Oil & Grease	---	15 mg/L	1/quarter	Grab
TSS	---	Report	1/quarter	Grab
pH Min/Max (s.u.)	6.0	9.0	1/quarter	Grab

Outfall 002: stormwater

EFFLUENT CHARACTERISTIC	MONTHLY AVERAGE	DAILY MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow-MGD	Report	Report	1/discharge	Estimate
TOC	---	50 mg/L	1/discharge	Grab
Oil & Grease	---	15 mg/L	1/discharge	Grab
TSS	---	75 mg/L	1/discharge	Grab
pH Min/Max values (su)	6.0	9.0/L	1/discharge	Grab

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(Existing Effluent Limits con't)

Outfall 003: treated sanitary wastewater

EFFLUENT CHARACTERISTIC	MONTHLY AVERAGE	WEEKLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow-MGD	Report	Report	1/3 months	Estimate
BOD ₅	30mg/l	45 mg/L	1/3 months	Grab
TSS	30 mg/l	45 mg/l	1/3 months	Grab
Fecal Coliform Colonies/100 ml	200	400	1/3 months	Grab
pH Min/Max values (su)	6.0	9.0	1/3 months	Grab

10. ENDANGERED SPECIES

The receiving waterbody, Subsegment 060906 of the Vermillion-Teche Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). The LDEQ, as instructed by the FWS in a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, as set forth in the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse affect upon any endangered or candidate species ot the critical habitat. The effluent linitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

11. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing o the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Offices is required.

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12. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to modify the existing permit for discharges described in the application.

13. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the proposed issuance of LPDES individual permits and may request a public hearing to clarify issues involved. This Office's address is on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. In accordance with LAC 33:IX.3105.B.2, only those permit limits and conditions pertaining to the draft modifications are open for public comment.

Public notice published in:

A local newspaper of general circulation and
The Office of Environmental Services Public Notice Mailing List